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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,722	07/12/2001	Ramon Vega	60005437-1	1555

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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EXAMINER

CULLER, JILL E

ART UNIT PAPER NUMBER

2854

DATE MAILED: 02/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/902,722

Examiner

Jill E. Culler

Applicant(s)

VEGA, RAMON

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the plurality of mesh-like substrates operable to support a different material, as in claim 4, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: On page 7, line 22, there should be a space between "medium" and "18". Appropriate correction is required.

Claim Objections

3. Claims 1-11 are objected to because of the following informalities: In claim 1, line 6, the phrase "said liquid" has no antecedent basis. For the purpose of furthering prosecution, it has been assumed that this was intended to be "said fluid". Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 4 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In the specification there is no clear indication of how the plurality of mesh-like substrates are intended to be implemented. Are they interchangeable, with only one substrate being used at a given time? Or are they present in the device simultaneously? For the purpose of furthering prosecution, it has been assumed that applicant intended to claim the plurality of substrates being used simultaneously.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3, 5-9, 11-16 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,389,148 to Matsunaga.

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Matsunaga shows a device for printing onto a medium comprising a mesh-like substrate, 14, having a hole, 12, the hole being configured to hold a material, 14, for application onto the medium, 18, a nozzle, 20, for expelling a fluid maneuverable substantially directly over the hole, wherein the nozzle is operable to expel the fluid onto the material in the hole, to thereby cause the material to be applied onto the medium and print an image on the medium. See column 3, lines 27-32. Matsunaga also shows that the substrate comprises a continuous loop in a substantially circular configuration. See Fig. 7. Matsunaga further shows a scraper, 51, for removing excess material from the mesh-like substrate. Matsunaga also teaches that the fluid comprises a liquid or a gas, see column 4, lines 17-21, and the material comprises a liquid or a solid substance, see column 3, lines 6-12, and that the material is configured to be held within the hole by capillary forces, see column 3, lines 12-14. Matsunaga shows that the hole comprises a generally conical configuration. See Fig. 4. Matsunaga further shows a power source connected to the mesh-like substrate to supply electricity whereby the material may be held within the hold by a charged attraction between the substrate and the material. See column 3, lines 50-53.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsunaga.

Matsunaga teaches all that is claimed as in the above rejection of claims 1-3, 5-9, 11-16 and 18 except for a plurality of mesh-like substrates, each operable to support a different material. Since the applicant appears to be claiming the plurality of substrates acting simultaneously, this would be a mere duplication of parts, not sufficient to patentably distinguish the claimed invention from the prior art since no new or unexpected results are apparent.

10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsunaga in view of U.S. Patent No. 4,205,320 to Fujii.

Matsunaga teaches all that is claimed as in the above rejection of claims 1-3, 5-9, 11-16 and 18 except that the supplied electricity is capable of magnetically charging the substrate so that the material may be held within the hole by a magnetically charged attraction between the substrate and the material.

Fujii teaches a substrate having ink held in the depressions when an electric field is applied to the substrate, creating a magnetic field. See column 6, lines 35-42.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the teachings of Fujii with the invention of Matsunaga to create a magnetic field for holding the material in the substrate in order to better retain the material in the mesh-like substrate.

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11. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsunaga in view of JP60058866 to Hirano et al.

Matsunaga teaches all that is claimed as in the above rejection of claims 1-3, 5-9, 11-16 and 18 except for cleaning a substantial portion of any remaining material on the mesh-like substrate in response to the mesh-like substrate requiring cleaning.

Hirano et al. teaches a method for printing onto a medium including cleaning the remaining ink from a screen after a printing step is carried out.

It would have been obvious to one having ordinary skill in the art at the time of the invention include the cleaning step of Hirano et al. with the printing method of Matsunaga in order to be able to reapply fresh material each time the substrate is used.

12. Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsunaga in view of U.S. Patent No. 5,964,158 to Takahashi.

Matsunaga teaches all that is claimed as in the above rejection of claims 1-3, 5-9, 11-16 and 18 except for a computer readable storage medium on which is embedded one or more computer programs which implement a method for printing onto a medium.

Takahashi teaches a computer readable storage medium on which is embedded one or more computer programs which implement a method for printing onto a medium.

It would have been obvious to one having ordinary skill in the art at the time of the invention to implement the method of Matsunaga using the computer readable storage medium as taught by Takahashi in order to be able to readily implement and control the process with a computer.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill E. Culler whose telephone number is (703) 308-1413. The examiner can normally be reached on M-Th 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (703) 305-6619. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

jec
February 21, 2003


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